

LAUNDRY MANAGEMENT SYSTEM

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LAUNDRY MANAGEMENT SYSTEM (LMS)

ZALILAWATI BINTI GHAZALI

This report is submitted in partial fulfillment of the requirements for the
Bachelor of Computer Science (Database Management)

**FACULTY OF INFORMATION AND COMMUNICATION TECHNOLOGY
UNIVERSITI TEKNIKAL MALAYSIA MELAKA
2008**

DECLARATION

I hereby declare that this project report entitled

LAUNDRY MANAGEMENT SYSTEM (LMS)

is written by me and is my own effort and that no part has been plagiarized
without citations.

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DEDICATION

Firstly, I would like to give a special dedication to my beloved parents Ghazali bin Salleh and Che Asnah binti Che Hasan because giving full support in completing my final year project which is entitled Laundry Management System (LMS).

Besides that, I also would like to dedicate to the people who help and support me either direct or indirectly in finishing my project successfully.

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ABSTRACT

The Laundry Management System (LMS) is specifically developed for Intersaf Launderette which is located at Jln Pernama, Kuala Krai, Kelantan. This application is developed to manage the laundry service and provide an automated backup and recovery for security management of information in the laundry. It is a client-server system which can only be access within three (3) main users; there are database administrator, manager, and staff. Only authorized user can login into the system and view the LMS application. The database administrator will maintain the backup and recovery and user privilege to view the system. Besides that, clerk's responsibility is to manage the customers and laundry service record, also the payment record. Furthermore, the laundress is to view customers' record and their services. Then, the manager of this laundry can view and update all the record in laundry. On the other hand, this LMS application is focused more on database management of laundry service besides maintaining the backup and recovery for the records in the database. The methodology of this system is System Development Life Cycle (SDLC) which is prototyping model. An analysis study has been done based on the current manual system and all the problems statements and requirements have been identified. Moreover, LMS is two-tier architecture system which involves client tier and application server tier which includes a database. The interfaces for LMS have been designed according to the requirement and needs of the current market. This Laundry Management System (LMS) will help to improve the performance of current situation and overcome the problems that arise nowadays.

ABSTRAK

Laundry Management System (LMS) telah dibangunkan khusus untuk Intersaf Launderette yang terletak di Jln Pernama, Kuala Krai, Kelantan. Sistem ini dibangunkan untuk menguruskan perkhidmatan dobi serta menyediakan *backup and recovery* secara automatik untuk kawalan keselamatan maklumat di dalam kedai dobi. Sistem ini merupakan sistem secara *client-server* dan hanya boleh digunakan untuk tiga (3) pengguna iaitu pengurus pangkalan data, pengurus, kakitangan. Hanya pengguna yang sah sahaja boleh mengakses data melalui aplikasi LMS. Pengurus pangkalan data akan mengawal *backup and recovery* dan menguruskan hak keistimewaan pengguna untuk melihat aplikasi sistem tersebut. Selain itu, kerani bertanggungjawab menguruskan maklumat pelanggan dan servis, juga maklumat pembayaran. Tambahan lagi, tugas pekerja dobi adalah untuk melihat maklumat pelanggan dan servis yang diperlukan. Dengan kata lain, aplikasi LMS lebih tertumpu kepada pengurusan pangkalan data untuk perkhidmatan dobi selain menguruskan *backup and recovery* secara automatik bagi setiap rekod dalam pangkalan data. Metodologi sistem ini ialah kitaran hidup pembangunan sistem iaitu model prototaip. Kajian telah dibuat berdasarkan sistem semasa yang secara manual dan semua kenyataan masalah dan keperluan sistem telah dikenal pasti. Tambahan lagi, LMS ialah dua bahagian sistem senibina yang melibatkan bahagian pengguna dan bahagian penyeliaan aplikasi yang melibatkan pangkalan data. Ruang antara-muka untuk LMS telah di lakar berdasarkan keperluan pasaran. *Laundry Management System (LMS)* akan membantu memperbaiki kebolehan dari situasi semasa dan mengatasi masalah yang dihadapi pada masa kini.

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LIST OF ABBREVIATIONS

LMS	Laundry Management System
DBMS	Database Management System
SSADM	Structured Systems Analysis and Design Methodology
DFD	Data Flow Diagram
DBLC	Database Life Cycle
SDLC	System Development Life Cycle
ERD	Entity Relationship Diagram
RAM	Random Access Memory
PSM	Projek Sarjana Muda
GUI	Graphical User Interface
LAN	Local Area Network
NF	Normal Form
PK	Primary Key
FK	Foreign Key
SQL	Structured Query Language
DDL	Data Definition Language
DML	Data Manipulation Language

DBA	Database Administrator
DCL	Data Control Language
FTP	File Transfer Protocol
TCP	Transmission Control Protocol

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CHAPTER I

INTRODUCTION

1.1 Introduction

Today's modernization flow of the world has witnessed tremendous change in the lifestyle of society. Computerized system in managing laundry has been well accepted especially in developing countries. This service is well accepted because it gives flexibility in terms of time for laundry management team to use it and this really helps them with their time management. The concept of computerized laundry management system in higher institutions is being developed by Intersaf Launderette. Intersaf Launderette was established in August 2001. Before this, the management of this company is constructing by using manual business process. All the information about the customer and staff are kept separately by using file system. It will cause the process of searching the information take more time and quite difficult.

Laundry Management System (LMS) is a new system that replaced the file system which most of laundry shop used. LMS is developed in order to ease the management in the laundry shop and to change the manual business process to the systematic business process. The LMS is developed for the manager and the staff in Intersaf Launderette.

1.2 Problem Statement

Currently, the laundry shop uses manual system to records their customer and other business information. Therefore, the data is inappropriate managed. Every time customer sends their clothes, the staff needs to records their information such as name, address and phone number using traditional filing system.

Another problem occurs using traditional manner is difficult to store and track the required record especially for reporting purpose. The use of manual system also creates an additional workload for the staff to keep and obtain the customer and staff information because this information is kept in a different file.

1.3 Objective

The objectives for this project are:

i. Computerized System

The proposed system will implement the computerized system which can perform a better managing process for the laundry. The data of the laundry service and the customer will kept in the save manner without the problem of losing the data.

ii. System and User Privileges

System and user privilege will be implemented in the proposed system to setting up the user level for each system user. This function is to provide the limitation of system accessing.

iii. Increase time performance

The time management is very important for the laundry management to ensure the service performs in better condition and on time. In addition, by using the computerized system, the business process will be more effective and faster.

iv. Automated Backup and Recovery

Every data in database must keep in a safe location. Hence, the database backup and recovery have been applied into LMS system to ensure that all the data are kept safely. The backup and recovery process will be implement as an automated backup and recovery to make the process flow easier and reduce time needed.

1.4 Scope

1.4.1 User

The target users for this system are Intersaf Launderette's staff, manager and system administrator.

i. Staff

Staff of Intersaf Launderette has privileges to insert, view, update and delete customer records. Besides managing service and launder details, staff also has a privilege to calculate payment for each transaction made.

ii. Manager

Owner or manager of Intersaf Launderette is a person who has privileges to view staff information and update their information.

iii. Administrator

Administrator is a person who has responsibility to maintain the system. Administrator has all privileges to this system and may grant the privileges to another system user.

1.4.2 Module

Some of the modules in Laundry Management System (LMS) are:

i. Login Module

This module allows user to access the system by entering a valid username and password.

ii. Customer Module

This module allows staff to add, update, delete and search customer record.

iii. Service Module

This module is used to record and retrieve service details which are available for staff of Intersaf Launderette to use it.

iv. Laundry Item Module

This module is used to record laundry item which refers to staff to handle it.

v. Payment Module

This module is specialized to calculate the total amount of payment for services. Furthermore, this module also will keep in LMS database.

vi. Backup and Recovery Module

This module is used when a staff or a manager want to make a backup to the records in database. They also can recover every data from database automatically using this module.

1.4.3 Technology

Some of the technologies used in developing Laundry Management System (LMS) are:

Table 1.1: Technology Tools

Technology Tools	Purpose
Structured Query Language (SQL) and PL/SQL	Programming language to develop LMS
Oracle9i Forms Developer	To design an interface which is the front-end for LMS
Oracle9i Database Server	Used as a back-end (database storage) which keeps all the data of Intersaf Laundrette